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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/686,112	10/10/2000	Bradley C. Love	HRL030	4429

28848 7590 10/21/2003

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EXAMINER
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HIRL, JOSEPH P

ART UNIT	PAPER NUMBER
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2121

DATE MAILED: 10/21/2003

8

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/686,112

**Applicant(s)**

LOVE, BRADLEY C.

**Examiner**

Joseph P. Hirl

**Art Unit**

2121

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 August 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,6,7,10,16,17,20 and 26 is/are rejected.
- 7) ☒ Claim(s) 2-5,8,9,11-15,18,19 and 21-25 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

### **DETAILED ACTION**

1. This Office Action is in response to an AMENDMENT entered August 6, 2003 for the patent application 09/686,112 filed on October 10, 2000.
2. The First Office Action of May 7, 2003 is fully incorporated into this Final Office Action by reference.
3. The claims and only the claims form the metes and bounds of the invention. "Office personnel are to give the claims their broadest reasonable interpretation in light of the supporting disclosure. *In re Morris*, 127 F.3d 1048, 1054-55, 44USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are not read into the claim. *In re Prater*, 415 F.2d, 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969)" (MPEP p 2100-8, c 2, I 45-48; p 2100-9, c 1, I 1-4). The Examiner has full latitude to interpret each claim in the broadest reasonable sense. Examiner will reference prior art using terminology familiar to one of ordinary skill in the art. Such an approach is broad in concept and can be either explicit or implicit in meaning.

### **Status of Claims**

4. Claims 1 and 10-28 are amended. Claims 1-28 are pending.

***Claim Objections***

5. Claims 2-5, 8, 9, 11-15, 18, 19, and 21-25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim, any intervening claims and all of the requirements of this office action.

***Response to Arguments***

5. The informality objections to claims 1, 16 and 27 are withdrawn.
6. The rejection of claims 26, 27 and 28 under 35 USC 112, second paragraph are withdrawn.
7. The rejection of claim 1 under 35 USC 112, first paragraph is withdrawn.
8. The rejection of claims 10 and 20 under 35 USC 101 are withdrawn.
9. Applicant's arguments filed on August 6, 2003 related to Claims 1, 6, 7, 10, 16, 17, 20, 26 have been fully considered but are not persuasive.

**In reference to Applicant's argument:**

In section 3 of the Office Action, the Examiner stated that Claims 7, 17 and 26 lack compliance with 35 USC 112, fourth paragraph in that these claims fail to additionally limit the subject matter of the related independent claim and therefore the Examiner rejected these claims under 37 CFR 1.75(c). The Examiner stated that by definition the system state is always a vector. The Applicant respectfully disagrees. The first partial paragraph on page 19 of the present application states, "Note that representing the problem as a vector is appropriate only when the test costs are not affected by which other tests have already been performed." Thus, it is not true that the system state is always a vector as asserted by the Examiner. Therefore, the Applicant submits that Claims 7, 17, and 26 are in compliance with 35 USC fourth paragraph as they additionally limit the subject matter of the related independent claim. If the Examiner still maintains his objection to these claims, the Applicant respectfully requests that the Examiner point out to the Applicant his basis for his interpretation that, by definition, the system state is always a vector.

Examiner's response:

To one of ordinary skill in the art, the system state is defined by  $n$  coordinates in Euclidean  $n$ -space. A vector is a well-known mathematical concept defined by  $n$  coordinates in Euclidean  $n$ -space. The well accepted methodology of vectors is commonly used to refer to the  $n$  coordinates of the system state in Euclidean  $n$ -space. If the applicant wishes to differentiate based on the test cost condition, then some other methodology needs to be used or an indefinite situation is consequential.

In reference to Applicant's argument:

Claims 1 and 20

In section 5 of the Office Action, the Examiner rejected Claims 1 and 20 under 35 USC 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as the invention. The Examiner stated that the term "mimic" is used which is a relative term and renders the invention indefinite. The Applicant respectfully disagrees.

The present application, page 16, lines 15-17 states "Although the explicit system 202 uses a combinatorial process to determine the best test or tests to run, over time the implicit system 206 learns to mimic the performance of the explicit system 202." The Applicant is unclear why the Examiner has asserted that the term "mimic" is relative. The Applicant respectfully requests that if the Examiner continues this rejection of Claims 1 and 20 based on the term "mimic" that the Examiner explain why he believes the term is relative. Because the term "mimic" is used in a definable context in the present application, the Applicant submits that one skilled in the art would understand what the term "mimic" means and thus, the term "mimic" is not indefinite.

Claims 6 and 16

In section 6 of the Office Action, the Examiner rejected Claims 6 and 16 under 35 USC 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as the invention. The Examiner stated that the term "sufficiently mimics" is used which is a relative term and renders the claim indefinite. The Applicant disagrees for the same reasons given above with reference to Claims 1 and 20.

Examiner's response:

See para 3 above. Very specifically and without equivocation, the claims form the metes and bounds of the invention. This is very important. To one of ordinary skill in

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the art, the term "mimic" introduces the concept of imitation and with the concept of imitation comes the question of "how much?" Since such a term introduces a sliding scale of interpretation, by consequence the claim is indefinite. The term "sufficiently" does not remove the aspect of indefiniteness.

In reference to Applicant's argument:

Claim 10

In section 7 of the Office Action, the Examiner rejected Claim 10 under 35 USC 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as the invention. The Examiner stated that the use of the preposition "on" is confusing and it is really the classifier that is evaluating the test. The Examiner suggested that perhaps the word "by" could be used as a replacement. The Applicant thanks the Examiner for his suggestion, but respectfully disagrees.

The last paragraph on page 15 of the present application states, "The explicit system 202 runs virtual or hypothetical tests on the classifier 200, which, in essence, acts as a model of the world in which the system operates." Thus, as disclosed in the present application, the tests are preformed on the classifier. The Applicant submits that the use of the preposition "on" is appropriate in this case.

Examiner's response:

See para 3 above. Again, very specifically and without equivocation, the claims form the metes and bounds of the invention. Specification, Fig. 2 applies. Note that the Explicit System is separate and distinct from that of the Classifier. This means that the Classifier will run the recommended test. Hence the word "by" is correct. These comments apply to steps c, d and e of claim 10. See also claim 1, step a wherein "classifier performs."

10. Claims 7, 17, and 26 lack compliance with 35 U.S.C. 112, fourth paragraph in that these claims fail to additionally limit the subject matter of the related independent

claim and are therefore objected to under 37 C.F.R. 1.75(c). By definition, the system state is always a vector.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. Claims 1 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. At Claim 6, line 4 the term "mimic" is used which is a relative term and renders the indefinite.
12. Claims 6 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. At Claim 6, line 4 the term "sufficiently mimics" is used which is a relative term and renders the claims indefinite. Claim 16 has a similar reference.
13. Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. At Claim 10, lines 10-13, the use of the preposition "on" is confusing it is really the classifier that is evaluating the test...perhaps the word "by" could be used as a replacement. Without such change, the claim is indefinite.

***Conclusion***

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

***Correspondence Information***

15. Any inquiry concerning this information or related to the subject disclosure should be directed to the Examiner, Joseph P. Hirl, whose telephone number is (703) 305-1668. The Examiner can be reached on Monday – Thursday from 6:00 a.m. to 4:30 p.m.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Anil Khatri can be reached at (703) 305-0282.



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Any response to this office action should be mailed to:

Commissioner of Patents and Trademarks,

Washington, D. C. 20231;

or faxed to:

(703) 746-7239 (for formal communications intended for entry);

or faxed to:

(703) 746-7290 (for informal or draft communications with notation of  
"Proposed" or "Draft" for the desk of the Examiner).

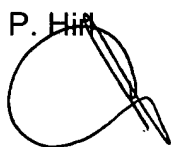
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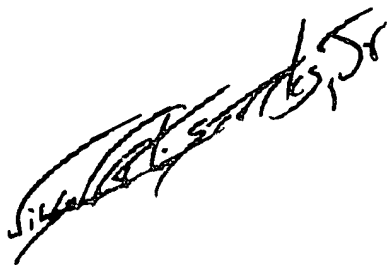
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Joseph P. Hill



October 7, 2003



Wilbert L. Starks, Jr.  
Primary Examiner  
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